UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,841	03/05/2002	Kuo-Rong Chen	CHEN3340/EM	5196

23364 7590 03/24/2005

BACON & THOMAS, PLLC
625 SLATERS LANE
FOURTH FLOOR
ALEXANDRIA, VA 22314

EXAMINER	
GENACK, MATTHEW W	
ART UNIT	**PAPER NUMBER**
2645	

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/087,841	CHEN ET AL.	
	Examiner	Art Unit	
	Matthew W. Genack	2645	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *5 March 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruyama *et. al.*, U.S. Patent No. 6,430,498 in view of Yun, U.S. Patent No. 5,945,949.

Regarding Claims 1 and 9, Maruyama *et. al.* discloses a portable terminal and a way of using said portable terminal to accomplish the function of walking navigation (Abstract, Fig. 9). The portable terminal communicates with an application server, which exists in the Internet or in an intranet (Column 9 Lines 5-9, Fig. 9). This connection is made by way of a base station (Column 9 Lines 9-14, Fig. 9). The portable terminal connects with the application server and requests information from the application server pertaining to facilities such as restaurants that the user may walk to (Column 9 Lines 5-27, Fig. 9). The user selects a destination, or searches for a destination that matches certain criteria, and a route to said destination is computed based on the current location of the portable terminal (Abstract, Column 2 Lines 55-61, Column 3 Lines 21-35). Maruyama *et. al.* discloses that any one of several methods may be used to ascertain the location of the portable terminal (Column 4 Lines 6-14). The application server contains a spatial information database that stores information pertaining to facilities such as restaurants (Column 9 Lines 24-27, Fig. 9); the user has

a search conducted for facilities of a certain type (such as a restaurant or movie theater) that may be walked to with the aid of provided directions (Column 7 Lines 31-64, Fig. 4).

Maruyama *et. al.* does not expressly disclose the use of the location information of the base station in the invention.

Yun discloses a method and apparatus for the determination of the position of a wireless mobile communication device involving two-way wireless communication between said wireless mobile communication device and a primary base station, with auxiliary base stations also receiving signals from the mobile communication device and transmitting signals (which depend on the aforementioned received signals) to the primary base station (Abstract). The primary base station uses a transmit time stamp, transmitted to the mobile communication device, and a receive time stamp from the mobile communication device, and compares the times, correcting for internal circuit delays. This gives a range value from the first base station to the mobile communication device, and passive listening by neighboring base stations gives second and third range values. The first base station's processor uses the three range values to determine the mobile communication device's position vector. This location, along with other information (such as directions), is transmitted to the user of the mobile communication device (Column 2 Line 40 to Column 3 Line 8, Fig. 6). Therefore, it is inherent that the positions of the base stations are known, since it is disclosed that the position of the mobile communications device can be computed from this echo technique.

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Maruyama *et. al.* by using the location information of the base station in the determination of the position of the portable terminal, and thereby assisting the user in arriving at the desired destination.

One of ordinary skill in the art would have been motivated to make this modification because of the simplicity and lack of expense of land-based position determination methods relative to such methods as GPS (Yun, Column 3 Lines 10-16).

Regarding Claims 2-3 and 10-11, Maruyama *et. al.*, as modified by Yun, teaches every limitation of Claims 1 and 9, upon which Claims 2-3 and 10-11 depend, as outlined above.

Maruyama *et. al.* and Yun as applied to Claims 1 and 9 above differ from Claims 2-3 and 10-11 in that Maruyama *et. al.* does not expressly disclose the use, either by request from the server or on the initiative of the base station, of the latitude and longitude of said base station in the determination of the position of the portable terminal.

Given the method of position determination of Yun's invention, as outlined above, it is inherent that the latitudes and longitudes of each base station are either stored in each respective base station and provided upon request to a central computation facility, or are previously stored in said computation facility.

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Maruyama *et. al.* by using the location information of the base station in the determination of the position of the portable

terminal (either by request from the server or by the initiative of the base station), and thereby assisting the user in arriving at the desired destination.

One of ordinary skill in the art would have been motivated to make this modification because of the simplicity and lack of expense of land-based position determination methods relative to such methods as GPS (Yun, Column 3 Lines 10-16).

Regarding Claims 4 and 12, Maruyama *et. al.* further discloses that the portable terminal may measure its own position via the use of GPS (Column 4 Lines 6-14). In this case, it is inherent that the Internet-based navigation system, which guides the user to a selected destination, receives the position information of the portable terminal from the portable terminal itself, rather than from the land based infrastructure (*e.g.*, base stations).

Regarding Claims 5 and 13, Maruyama *et. al.*, as modified by Yun, discloses every limitation of Claims 1 and 9, upon which Claims 5 and 13 depend, as outlined above. Furthermore, Maruyama *et. al.* discloses a specific type of service referred to as "Neighborhood Guidance Service," whereby a search for facilities of a certain type, (restaurants, etc.) in the vicinity of the current location of the portable terminal, is requested by the user (Column 3 Lines 26-29).

Regarding Claims 6 and 14, Maruyama *et. al.*, as modified by Yun, discloses every limitation of Claims 1 and 9, upon which Claims 6 and 14 depend, as outlined above. Furthermore, Maruyama *et. al.* discloses that the portable terminal may be a cellular telephone (Column 1 Lines 5-10, Column 2 Lines 55-61).

Regarding Claims 7 and 15, Maruyama *et. al.*, as modified by Yun, discloses every limitation of Claims 1 and 9, upon which Claims 6 and 14 depend, as outlined above.

Maruyama *et. al.* does not expressly disclose the use of the invention within the context of car travel.

Yun teaches the usefulness of mobile position determination within the context of car travel (Column 1 Lines 31-47, Fig. 5).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Maruyama *et. al.* as already modified by Yun, by adapting the device for use in a car.

One of ordinary skill in the art would have been motivated to make this modification because of the usefulness of such a system for walling as well as car travel.

Regarding Claims 8 and 16, Maruyama *et. al.*, as modified by Yun, discloses every limitation of Claims 1 and 9, upon which Claims 8 and 16 depend, as outlined above. Furthermore, Maruyama *et. al.* discloses that the portable terminal may measure its own position via the use of GPS (Column 4 Lines 6-14). In this case, it is inherent that the Internet-based navigation system, which guides the user to a selected destination, receives the position information of the portable terminal from the portable terminal itself, rather than from the land based infrastructure (*e.g.*, base stations).

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew W. Genack whose telephone number is 703-605-4305. The examiner can normally be reached on FLEX.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on 703-305-4895. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Matthew Genack

Examiner

Art Unit 2645

Matthew Genack

17 March 2005

FAN TSANG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600